

CLAIMS

1. A transmitter optical sub assembly including a laser source having associated therewith a laser driver
5 as well as a package for said laser source and said laser driver, wherein said package includes respective separate compartments for said laser source and said laser driver, the laser source and the laser driver being arranged in said separate compartments whereby
10 said laser source is exempt from being directly irradiated by said laser driver.

2. The assembly of claim 1, wherein said package includes a package wall opaque to IR emission separating said laser source and said laser driver.

15 3. The assembly of either of claims 1 or 2, wherein said package is essentially comprised of a shaped body of an IR opaque material.

4. The assembly of either of claims 1 or 2, wherein said package is essentially comprised of a shaped body
20 of a ceramics material.

5. The assembly of either of claims 1 or 2, wherein said package is essentially comprised of a shaped body of alumina.

6. The assembly of any of the previous claims,
25 wherein the compartment provided in said package for said laser source is surrounded by walls.

7. The assembly of claim 6, wherein it includes feed through lines connecting said laser source to said laser driver, and in that said feed through lines
30 extend through the walls of said compartment provided in said package for said laser source.

8. The assembly of any of the previous claims, wherein it includes feed through lines connecting said laser source to said laser driver, wherein said lines

are laid out onto a substrate such an alumina substrate.

9. The assembly of any of the previous claims, wherein said package includes a compartment for hosting
5 said laser source together with alignment optics associated therewith.

10. The assembly of any of the previous claims, wherein the compartment provided in said package for said laser driver is defined by a base member extending
10 from the body of the package.

11. The assembly of any of the previous claims, wherein the compartment provided in said package for said laser driver is defined by a base member exempt from boundary walls.

15 12. The assembly of any of the previous claims, wherein the compartment provided in said package for said laser driver includes a recess for at least partly housing the laser driver.

20 13. The assembly of any of the previous claims, wherein the compartment provided in said package for said laser driver has associated a thermal path extending through the package.

25 14. The assembly of claim 13, wherein said thermal path includes at least one metalization extending through the package.

15. The assembly of either of claims 13 or 14, wherein said thermal path extends towards a plate.

30 16. The assembly of claim 15, wherein said plate is generally exposed to the outside surface of the package.

17. The assembly of either of claims 15 or 16, wherein said plate includes a ribbed configuration to guarantee thermal dissipation.

35 18. A transmitter optical sub assembly including a laser source having associated therewith a laser

driver as well as a package for said laser source and said laser driver, wherein said package includes respective separate compartments for said laser source and said laser driver, the laser source and the laser driver being arranged in said separate compartments whereby said laser source is exempt from being directly irradiated by said laser driver, and said compartment provided in said package for said laser driver is defined by a base member exempt from boundary walls.

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